

HAUERSLEVIA : A NEW GENUS IN THE EFFUSED HETEROBASIDIOMYCETES

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RÉSUMÉ : Le nouveau genre *Hauerslevia* est proposé pour *Sebacina pulverulenta*, une espèce caractérisée par ses gloécystides et ses basides non ou demi-septées.

MOTS-CLEFS : Ceratobasidiales; Exidiales; *Sebacina*

ABSTRACT : The new genus *Hauerslevia* is proposed to accommodate *Sebacina pulverulenta*, a species characterized by its gloecystidia and aseptate or partly-septate basidia.

KEY WORDS : Ceratobasidiales; Exidiales ; *Sebacina*.

Hauerslev (1976) described a new and unusual, effused, basidiomycetous species from Denmark, *Sebacina pulverulenta* Hauerslev, having conspicuous gloecystidia, elongated basidiospores, and partly-septate basidia. Several collections of *S. pulverulenta* have now been made in southern England and the Channel Islands, from which it is clear that the species is not congeneric with *S. incrustans* (Pers.) Tul., the type of *Sebacina* Tul., but represents a new, monotypic genus of its own.

Hauerslevia P. Roberts gen. nov.

Basidiomata resupinata, plus minusve ceracea. **Hyphae** perconspicuae, ca. 2.5-4 µm latae, in typo generis non fibulatae. **Basidia** subglobosa vel ellipsoidea ($Q = 1.1-1.4$), saepe lateraliter stipitata. **Sterigmata** 4, ab imo ad summum gradatim decrescentia, basi contigua. **Cystidia** tubulosa, saepe sinuosa, granulis cyanophilis conspicuis ad apicem. **Basidiosporae** in typo generis elongatae. **Typus generis :** *Hauerslevia pulverulenta*.

Etymology : named, with kind permission, in honour of the noted Danish mycologist, K. Hauerslev.

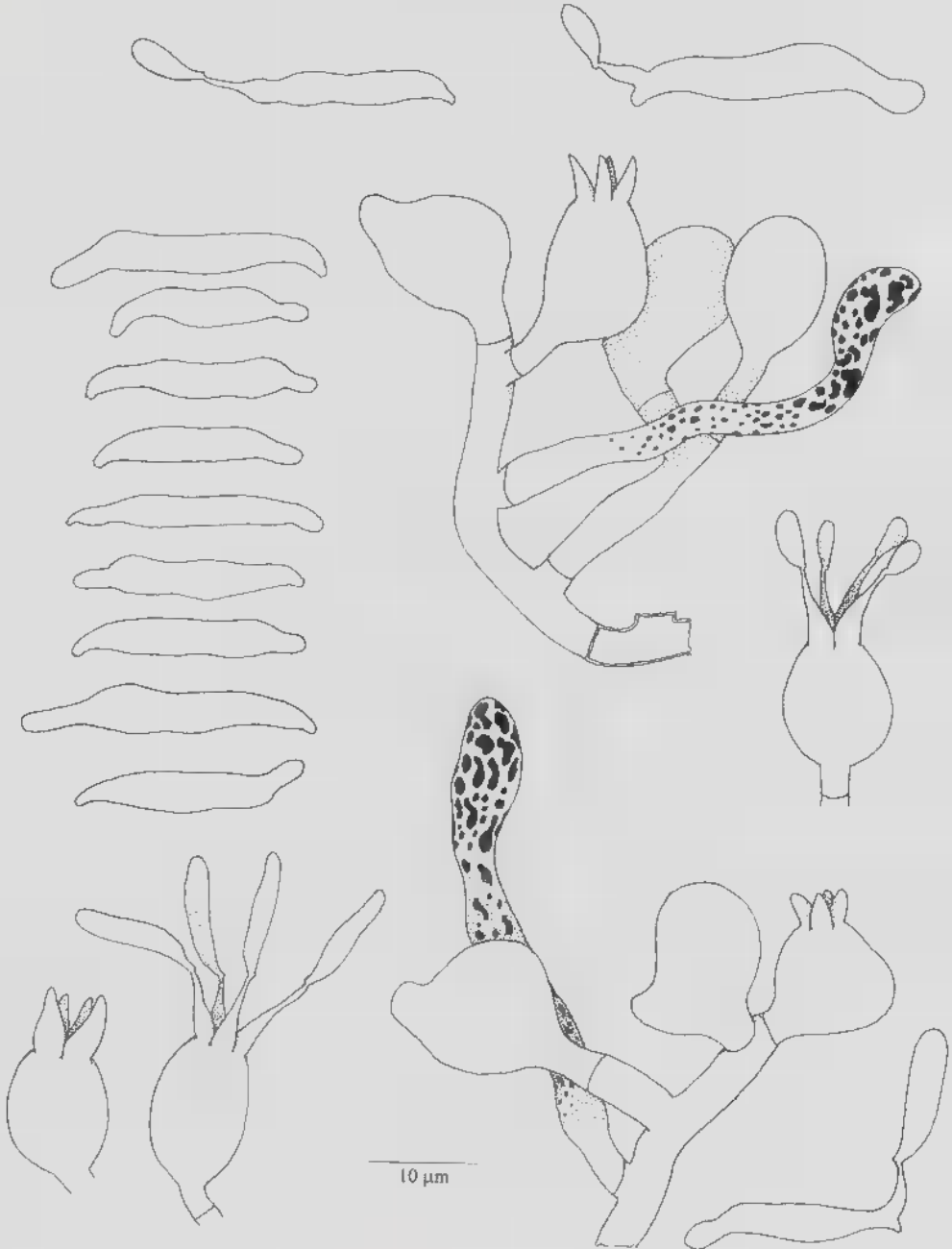


Fig. 1. *Hauerlevia pulverulenta* (England, P. Roberts 337). Basidiospores, three self-replicating (two at top, one bottom right); two sections of hymenium, showing young, often papillate basidia and cystidia with cyanophilous (dark) inclusions; individual basidia showing basally contiguous sterigmata.

Hauerslevia pulverulenta (Hauerslev) P. Roberts *comb. nov.*
Sebacina pulverulenta Hauerslev, *Friesia* 11 : 99 (1976).

Fig. 1.

Basidiome: thin, effused, somewhat ceraceous, greyish. **Hymenium:** thin, open textured, composed of a single layer of basidia intermixed with cystidia arising from laterally branching hyphae. **Hyphae:** 2.5–4 μm wide, lacking clamp-connexions; hyaline and thin-walled, not swollen, mainly composed of long, straight, hyphal compartments. **Basidia:** subglobose to ellipsoid ($Q = 1.1\text{--}1.4$), 9–12.5 \times 8–11 μm , normally with distinct, often lateral stalk; basidia frequently have a short hyphal outgrowth and then appear cuboid to papillate. **Sterigmata:** four, measuring 7–10 \times 2–3.5 μm , widest at the base, sometimes swollen, closely set and contiguous towards the base. **Cystidia:** tubular, thin-walled, hypha-like, often sinuous, up to 120 μm long, containing conspicuous, cyanophilous granules towards the apex. **Basidiospores:** elongated ($Q = 5.2\text{--}7.5$), (13–)15–30 \times 2.5–5 μm , producing secondary spores by replication. **Habitat & ecology:** on fallen wood; saprotroph. **Distribution:** British Isles (K); Denmark (type).

Type collection: DENMARK: Stigsnaes, on bark of deciduous tree, 9 Oct. 1975, K Hauerslev 5103, C.

Collections examined: CHANNEL ISLES: Sark, Dixcart Valley, on fallen wood, 6 Nov. 1993, P. Roberts 732, K(M) 33216; ENGLAND: Devon, Orley Common, on fallen deciduous wood, 30 Nov. 1991, P. Roberts 337, K(M) 33214; same location and substratum, 9 Dec. 1995, P. Roberts, K(M) 32878; Slapton, France Wood, on deciduous log, 28 Nov. 1992, P. Roberts 530, K(M) 33215; Slapton, Strete Gate, on fallen wood, probably *Cupressus*, 10 May 1994, P. Roberts 869, K(M) 33217.

Sebacina pulverulenta was originally described within the family *Tremellaceae* and characterized by having gloecystidia, incompletely septate basidia, and "crowded" sterigmata (Hauerslev, 1976). Oberwinkler (*in litt.*) has confirmed the partial septation of the basidia, based on a re-examination of the type specimen (cited above). However, this septation could not be clearly seen in living British collections, although some mature basidia had divisions resembling septa between the contiguous basal parts of the sterigmata (Fig 1).

Comparison with *Sebacina incrustans*, the generic type, shows that *Hauerslevia* is not closely related to *Sebacina sensu stricto*. *Sebacina* species have conspicuous, incrusting or erect, gelatinous to cartilaginous basidiomes with septate, *Exidia*-like basidia, a surface layer of branched hyphidia, and narrow, often thick-walled or dimitic hyphae in a densely gelatinized context. *Hauerslevia* has an inconspicuous, waxy basidiome with globose to cuboid basidia, no hyphidial layer, and comparatively wide, thin-walled hyphae in a non-gelatinized context. The genus most closely resembles *Ceratobasidium* D. P. Rogers (with aseptate basidia) or *Ceratosebacina* P. Roberts (with septate basidia). Both have a similar hymenial structure, similar hyphae, and (apart from the sterigmata) similar basidia, often laterally stalked.

The unusual sterigmata and presence of cystidia containing conspicuously cyanophilous granules (the latter seemingly unique to *Hauerslevia*) warrant the creation of a new genus. But whether *Hauerslevia* belongs to the Ceratobasidiales or Exidiales will require further investigation at the ultrastructural or molecular level.

RÉFÉRENCE

- HAUERSKLEV K., 1976 — New and rare *Tremellaceae* on record from Denmark. *Friesia* 11: 94-115.